

Requested Patent: EP0407354A3

Title:

MACHINE FOR CREASING AND CUTTING ENDLESS WEBS OF CARDBOARD  
AND THE LIKE. ;

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Application Number: EP19900830246 19900531 ;

Priority Number(s): IT19890009457 19890621 ;

IPC Classification: B23D35/00; B26D7/26 ;

Equivalents:

BR9002871, CA2018761, DE69008256D, DE69008256T, ES2051499T, IT1234460,  
JP3130137, US5120297 ;

**ABSTRACT:**

The machine for creasing and cutting an endless web of cardboard or the like comprises at least two pairs of creasing rollers (21, 22, 24, 25) and at least two pairs of cutting rollers (32, 33, 34, 35); the web of cardboard being processed passes between the rollers (21, 22) of a first pair of creasing rollers and the rollers (32, 33) of a first pair of cutting rollers, while the other pair of creasing rollers (24, 25) and the other pair of cutting rollers (34, 35) are situated in inactive positions in which there operate means (184, 184 min ) for the positioning of the respective tools; the two pairs of creasing rollers (21, 22, 24, 25) and the two pairs of cutting rollers (32, 33, 34, 35) are carried by an angularly mobile assembly (17, 17) which alternately assumes one or other of two angular positions in order to arrange one or other of said two pairs of creasing rollers and one or other of said two pairs of cutting rollers in the working position. (Fig. 5).



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## EUROPEAN PATENT APPLICATION

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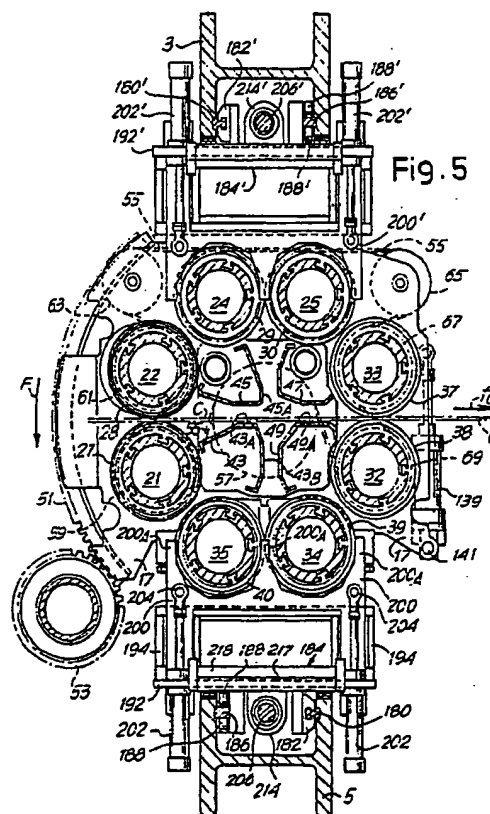
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(54) Machine for creasing and cutting endless webs of cardboard and the like.

(57) The machine for creasing and cutting an endless web of cardboard or the like comprises at least two pairs of creasing rollers (21, 22, 24, 25) and at least two pairs of cutting rollers (32, 33, 34, 35); the web of cardboard being processed passes between the rollers (21, 22) of a first pair of creasing rollers and the rollers (32, 33) of a first pair of cutting rollers, while the other pair of creasing rollers (24, 25) and the other pair of cutting rollers (34, 35) are situated in inactive positions in which there operate means (184, 184') for the positioning of the respective tools; the two pairs of creasing rollers (21, 22, 24, 25) and the two pairs of cutting rollers (32, 33, 34, 35) are carried by an angularly mobile assembly (17, 17') which alternately assumes one or other of two angular positions in order to arrange one or other of said two pairs of creasing rollers and one or other of said two pairs of cutting rollers in the working position. (Fig. 5).



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# EUROPEAN SEARCH REPORT

Application Number

EP 90 83 0246

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claims	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
2	X US-A-3 587 374 (W.A. STEWART) * Whole document *	1-10,14 ,16-18	B 23 D 35/00 B 26 D 7/26
1	X US-A-1 020 321 (J.W. EASTER et al.) * Page 2, left-hand column, line 14 - right-hand column, line 118; figures 1,2 *	1,2,7	
1	X FR-A-2 533 488 (S & S CORRUGATED PAPER MACHINERY CO., INC.) * Page 7, line 17 - page 9, line 33; figures 1,2 *	1,2,16	
1	A GB-A-1 194 066 (S & S CORRUGATED PAPER MACHINERY CO., INC.) * Page 2, left-hand column, line 34 - right-hand column, line 87; page 3, left-hand column, lines 5-19; figures 1-4 *	1,2,16	
1	A FR-A-1 414 043 (PARSONS & WHITEMORE) * Page 3, left-hand column, lines 33-59; figure 6 *	1,2	TECHNICAL FIELDS SEARCHED (Int. Cl.5)
1	A FR-A-2 244 620 (RENGO CO.) * Page 10, line 1 - page 11, line 5; figures 5,6 *	1,2	B 23 D B 26 D B 29 C B 31 F
9	A DE-B-1 063 996 (T & T VICARS LTD) * Column 5, line 33 - column 6, line 11; figure 3 *	5,6	
1	A EP-A-0 234 559 (IBSM MEHLTRETTER GmbH) * Column 1, lines 41-46; column 4, lines 38-47; figures 2,3 *	8-10	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 16-10-1990	Examiner TOPALIDIS A.
CATEGORY OF CITED DOCUMENTS			
X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document		T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons * member of the same patent family, corresponding document	



### CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ All claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claims:
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

### ☒ LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions or groups of inventions, namely:

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- ☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☒ None of the further search fees has been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims: 1-10, 14, 16-18



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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 5)
A	DE-C- 307 865 (J. HÜBNER) * Page 1, right-hand column, lines 42-56; page 2, right-hand column, lines 2-11; figure * -----	1,3	
			TECHNICAL FIELDS SEARCHED (Int. Cl. 5)
<del>The present search report has been drawn up for all claims</del>			
Place of search THE HAGUE		Date of completion of the search 16-10-1990	Examiner TOPALIDIS A.
<b>CATEGORY OF CITED DOCUMENTS</b>			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			
T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons * : member of the same patent family, corresponding document			



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#### LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions or groups of inventions,

namely:

1. Claims 1-10,14,16-18: Changing cutting creasing rollers and positioning tools on said rollers.
2. Claims 11,12,13,15: Axially movement and replacement of cutting rollers and cutting tools.